

Special Issue

Behavior and Design of Fiber Reinforced Polymer Components and Structures

Message from the Guest Editor

The present Special Issue focuses on recent developments in (a) the characterization of mechanical and material behaviour at the nano, micro, meso, and macro levels of composite materials using experimental, analytical, and computational methods and techniques, and (b) design approaches using deterministic and probabilistic methodologies for components and structures comprising such materials. This Special Issue welcomes the submission of research focusing on tensile, compressive, shear, fracture, fatigue, creep, impact, and damping properties, as well as the durability and degradation of such materials, components and structures due to temperature and moisture. This also includes studies on nanocomposites involving the atomistic, molecular, and computational modeling of continuum mechanics, experimental investigations, and hybrid approaches. The application of these materials in machine tools, machine elements, mechanical structures, aerospace structures, automobile components, naval vessels, helicopter blades and rotors, and infrastructure will be of interest to this Special Issue.

- polymer materials
- thermosets
- thermoplastics
- carbon fiber
- mechanical behavior
- fracture

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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